

CLAIMS

1. A torque generating electric motor comprising: an output shaft; force transfer means mounted on said shaft for conversion of drive forces into torque applied to the shaft; actuator means engageable with said force transfer means for imparting said drive forces thereto in response to energization thereof; positioning means mounting the actuator means in operative relation to the force transfer means for varying the drive force imparted thereto during said energization of the actuator means; and rotation resistance means in operative engagement with the output shaft for resisting rotation imparted thereto during deenergization of the actuator means.
2. The electric motor as defined in claim 1, including: electromagnetic means for magnetically negating resistance imposed on the output shaft by the rotation resistance means during said deenergization of the actuator means.
3. The electric motor as defined in claim 2, wherein said force transfer means comprises: discs of different diameters splined to the output shaft having indented peripheries engaged by the actuator means.
4. The electric motor as defined in claim 3, wherein said actuator means comprises: a plurality of electromagnetically energized devices having driving push rods projecting therefrom into force transferring engagement with the discs of the force transfer means.
5. The electric motor as defined in claim 4, wherein said rotation resistance means comprises: a rheological braking unit.

6. The electric motor as defined in claim 1, wherein said force transfer means comprises: discs of different diameters splined to the output shaft having indented peripheries engaged by the actuator means.
7. The electric motor as defined in claim 1, wherein said actuator means comprises: a plurality of electromagnetically energized devices having driving push rods projecting therefrom into force transferring engagement with the force transfer means.
8. The electric motor as defined in claim 2, wherein said rotation resistance means comprises: a rheological braking unit.